AMENDMENTS TO THE DRAWINGS

Please amend the figures as shown in the enclosed replacement sheets. The attached sheets of drawings include changes to Figs. 15, 19, and 28. Figs. 15 and 19 have been amended to return the figures to the originally filed figures. Fig. 28 has been amended to label the elements in the figure to aid understanding of the claimed limitations. No new matter has been added by the amendments.

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application and for courtesies extended during the Examiner Interview conducted on September 10, 2009.

Disposition of Claims

Claims 60-69 are currently pending in this application. Claim 60 is independent. The remaining claims depend, directly or indirectly, from claim 60.

Amendments to the Claims

Independent claims 60-62 were amended to more precisely claim the present invention. No new matter is added by way of these amendments. Support for the amendments may be found, for example, in Figs 28, 29, 30, and 32, the accompanying text of the specification, the original claims of the application, as well as in the specification as amended by this reply.

Amendments to the Specification

Paragraph [0126] of the published application was amended to correct an error that appeared in the specification due to translation. No new matter has been added by the amendment.

Rejection(s) under 35 U.S.C. § 102/103

Claims 60-69 of the present application stand rejected under 35 U.S.C. § 102(a) as being anticipated by, and 103(a) as being unpatentable over, Japanese Patent Application Publication No. 2002-158219 ("Shimonishi"). Claims 60-62 have been amended by this reply.

To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

At the outset, the Examiner states in lines 4-5 on page 9 of the Office Action that "Shimonishi's first electrode body (1'; Figure 1, 2; [0024]) is not divided as is Applicant's first electrode body (51) – claim 62," states in lines 6-7 on page 10 of the Office Action, "Shimonishi's...make integral parts (1') separate," and states in line 9 on page 10 of the Office Action, "make whole elements separable." Applicant respectfully notes that the claimed first electrode body is not divided.

Claim 60, as amended, requires, in part, "a side of the first internal space nearer to the second electrode body in the arranging direction and both the upstream and the downstream sides of the first internal space in the passage direction being surrounded by the first case body and a remaining side of the first internal space farther from the second electrode body in the arranging direction being opened to an outside and provided as the first opening."

The Examiner asserts that element 2' reads on the first case body of the claimed invention, and that there is a first opening in the plane of the page in Fig. 1 of Shimonishi. However, the claimed invention requires that a side of the first case body *in the arranging direction farther from the second electrode* be open. The plane of the page in Fig. 1 of Shimonishi is clearly not in the arranging direction but, instead, is in the longitudinal direction. In the arranging direction, which is left-right in Fig. 1 of Shimonishi, element 2' is closed on both sides.

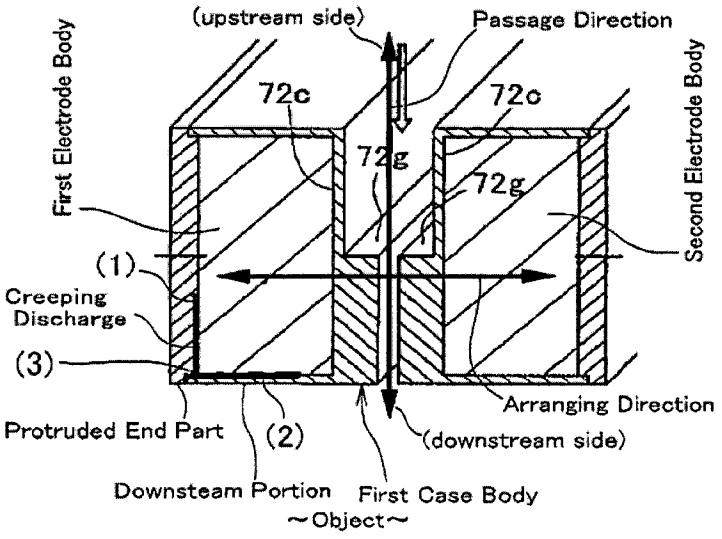
In fact, Shimonishi teaches away from the above features of claim 60. Shimonishi teaches a multiple row-type plasma processing apparatus having three or more electrodes and two or more discharge spaces (See paragraph [0011] and Figs. 1 and 2 of

Shimonishi). Each of the electrodes 1, 1', 1" is covered by a solid dielectric bodies 2, 2', 2" for preventing generation of arc discharge (See paragraph [0036] of Shimonishi). If a side of the first case body 2' farther from the second electrode body 1, 1" in the arranging direction is opened and provided as the first opening, arc discharge will occur between the first electrode body 1' and the second electrode body 1, 1" through the first opening.

Thus, Shimonishi fails to show or suggest at least the above limitations of amended claim 60.

Additionally, claim 60, as amended, requires, in part, "an end part on a side of said first opening of a portion of said first case body on the downstream side of the first internal space being protruded in said one remaining side farther from the second electrode body in the arranging direction relative to said first electrode body."

As shown in Fig. 28, a marked-up version of which is reproduced in part below, a side of the first case body on the downstream side (down in the below figure) has an end part that protrudes in the arranging direction away from the second electrode body (left in the below figure).



The claimed protruded end part creates an advantage and unexpected effect of attenuating creeping discharge from the first electrode body. This is because the protruded end part increases the creeping distance, bends the creeping channel, and helps prevent the creeping discharge from falling on the object to be processed.

As shown in the above figure, the creeping discharge generates on a downstream side surface (2) and, specifically, on the corner (3) of the first electrode body where the rear surface (1) and the downstream side surface (2) cross. The creeping discharge on the downstream side surface (2) is prevented from running directly to the object to be processed by the downstream portion of the first case body on the downstream side of the first internal space. The creeping discharge on the corner (3) is prevented from running directly on the object to be processed by the protruded end part of the downstream portion of the first case body.

Moreover, the protruded end part can also suppress generation of the creeping discharge at the corner (3) because of release of electric field concentration at the corner (3). The creeping discharge creeps along the protruded end part not only away from the first electrode body, but also, farther away from the second electrode body. Significant attenuation of the creeping discharge can thus be achieved.

Additionally, the creeping discharge is required to turn along the protruded end part in order to reach the object to be processed. The required turn provides additional significant attenuation of the creeping discharge so that the creeping discharge falling on the object is greatly reduced. Thus, even when creeping discharge is generated by the first electrode body, the creeping discharge falling on the object to be processed can be minimized, thereby reducing damage on the object to be processed.

As the Examiner admits in lines 18-22 on page 9 of the Office Action, Shimonishi does not show or suggest an end part on any of the case bodies 2, 2', 2" that protrudes in the arranging direction, i.e., left-right direction in Fig. 1. Thus, Shimonishi fails to show or suggest at least the above limitations of claim 60.

In view of the above, claim 60 is patentable over Shimonishi, at least for the above reasons. Claims 61-69 depend, either directly or indirectly, from claim 60. Thus, claims 61-69 are patentable over Shimonishi, at least for the same reasons as claim 60.

Additionally, claim 61 further requires, in part, "an elongate lid made of a solid dielectric material for closing said first opening," and "an end part ion the downstream side of said lid covering an end surface of said protruded end part in a location more forward in said one remaining side farther from the second electrode body in the arranging direction from said first electrode body."

The additional structures of claim 61 makes it difficult for the creeping discharge to reach the joint between the end surface of the protruded end part of the first case body and the end part of the lid on the downstream side, thus helping prevent leakage of the creeping discharge outside through the joint. Shimonishi clearly does not show or suggest the claimed lid closing a first opening. Thus, claim 61 is also patentable over Shimonishi, at least for the above reasons.

Claim 62 further requires, in part, "an opposite side of the second internal space farther from the first electrode body in the arranging direction being opened and provided as the second opening," and "an end part on a side of said second opening of a portion of said second case body on the downstream side of the second internal space being protruded in said opposite

side farther from the first electrode body in said arranging direction relative to said second electrode body."

The claimed protruded end part creates an advantage and unexpected effect of attenuating creeping discharge from the second electrode body. This is because the protruded end part increases the creeping distance, bends the creeping channel, and helps prevent the creeping discharge from falling on the object to be processed.

Furthermore, there is an additional advantage and unexpected effect that the creeping discharge from the first case body and the creeping discharge from the second case body can be prevented from communicating with each other at the downstream side of the case bodies near the object, because the first and second case bodies are opened to opposite sides from each other in the arranging direction.

As the Examiner admits in lines 6-15 on page 9 of the Office Action, Shimonishi fails to show or suggest the above limitations of claim 62. Because, as explained above, the above limitations create an advantage and unexpected effect, the limitations are not mere optimizations of dimensions, and claim 62 is also patentable over Shimonishi, at least for the above reasons.

Claim 69 further requires, in part, "said first dielectric case body is provided with a gas uniformizing passage for dispersing said processing gas uniformly in said longitudinal direction and for introducing said processing gas into said gas passage."

As the Examiner admits in lines 16-20 on page 9 of the Office Action, Shimonishi fails to show or suggest the above limitations of claim 69. In fact, Shimonishi discloses a gas uniformizing passage for dispersing the processing gas uniformly in the longitudinal direction and for introducing the processing gas into the gas passage, as shown in

Fig. 4 of Shimonishi. Thus, Shimonishi fails to show or suggest a first dielectric case body is provided with *the* gas uniformizing passage. Thus, claim 69 is also patentable over Shimonishi, at least for the above reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply to be responsive to all outstanding issues and place the application in condition for allowance. If this belief is incorrect, or any other issues arise, do not hesitate to contact the undersigned or his associates at the telephone number listed below. Favorable action in the form of a Notice of Allowance is respectfully requested. Please apply any charges not covered, or any credits, to Deposit Account No. 50-0591, under Order No. 12088/019001 from which the undersigned is authorized to draw.

Dated: November 10, 2009

Respectfully submitted,

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